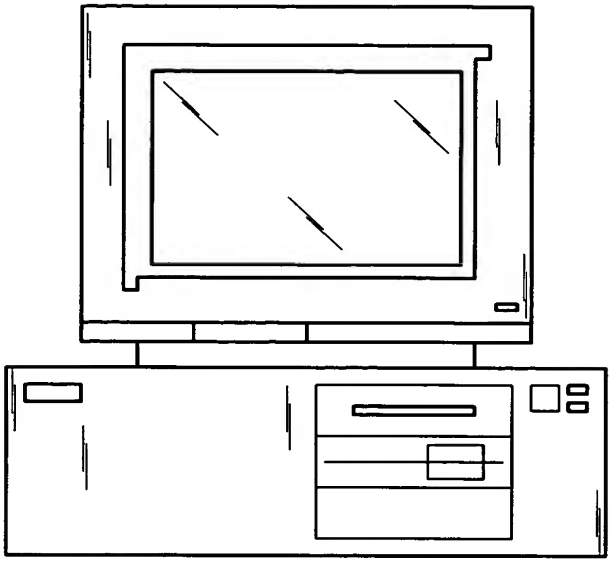


Computer System
82

FIG. 1

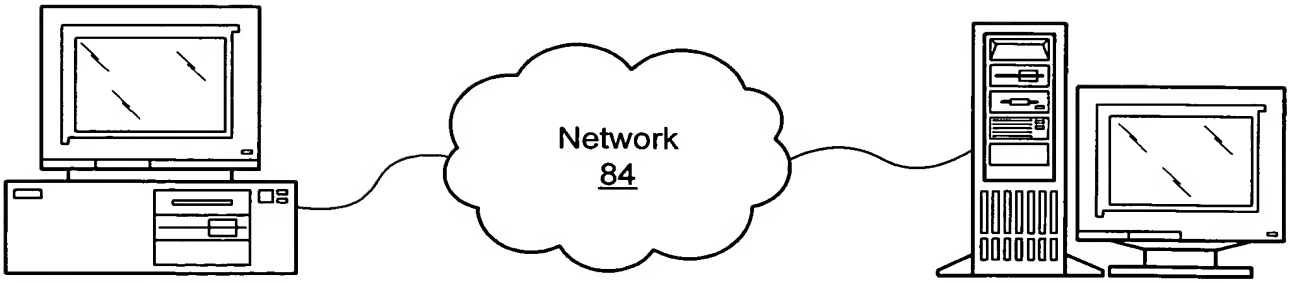


FIG. 1A

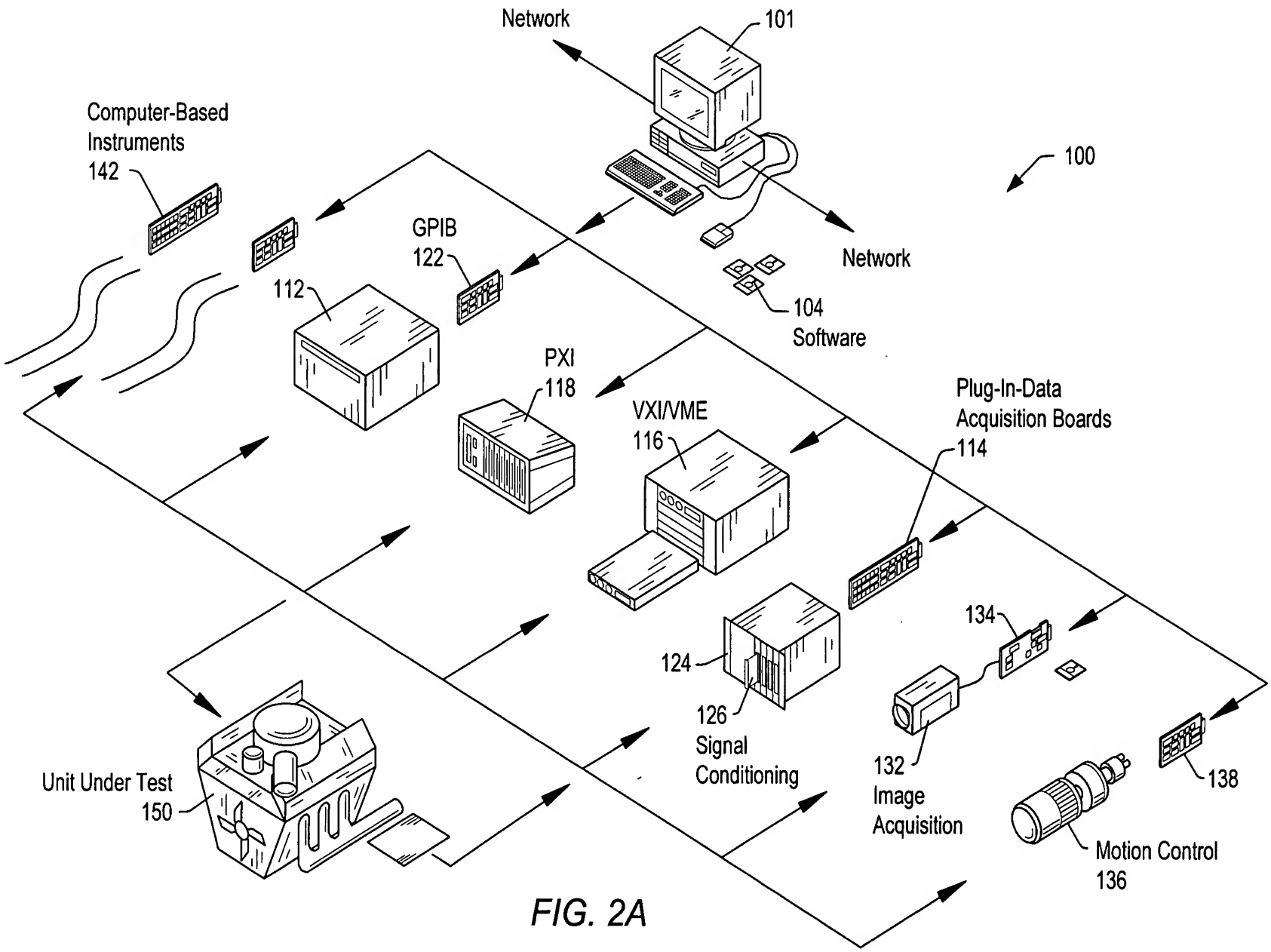

Network
101
Computer-Based
Instruments
142
100
GPIB
122
Network
112
104
Software
PXI
118
VXI/VME
116
Plug-In-Data
Acquisition Boards
114
134
124
126
Signal
Conditioning
132
Image
Acquisition
138
Unit Under Test
150
Motion Control
136

FIG. 2A

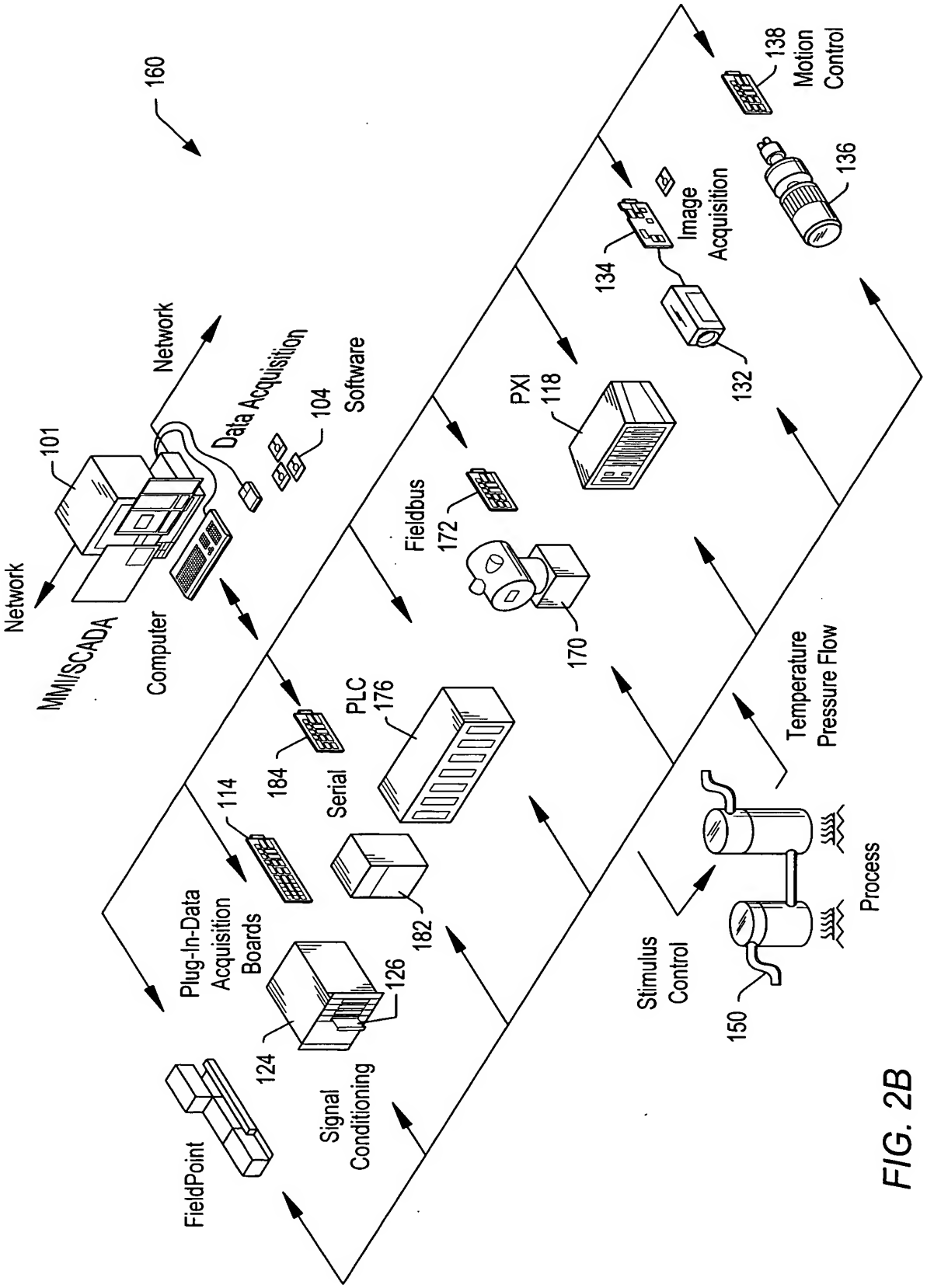

160
101
Network
MMI/SCADA
Computer
Network
Data Acquisition
104
Software
Fieldbus
172
PXI
118
170
138
Motion
Control
136
134
Image
Acquisition
132
114
184
Serial
PLC
176
Plug-In-Data
Acquisition
Boards
182
126
124
Signal
Conditioning
FieldPoint
Stimulus
Control
150
Temperature
Pressure Flow
Process

FIG. 2B

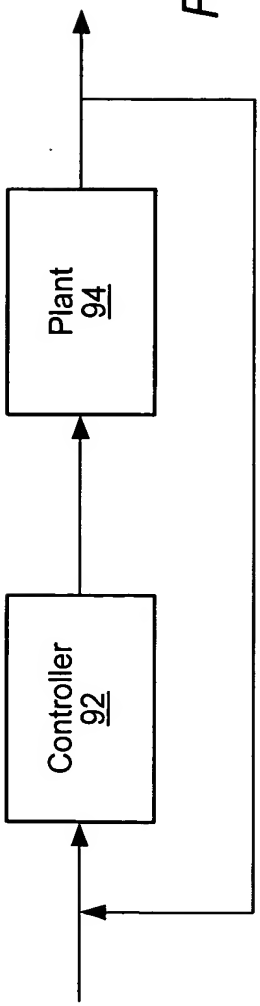


FIG. 3A

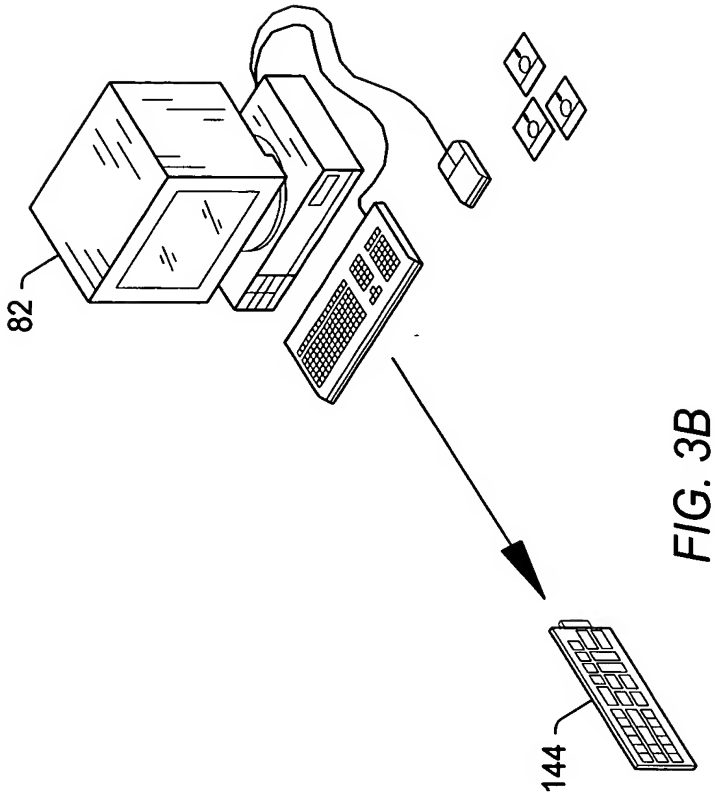


FIG. 3B

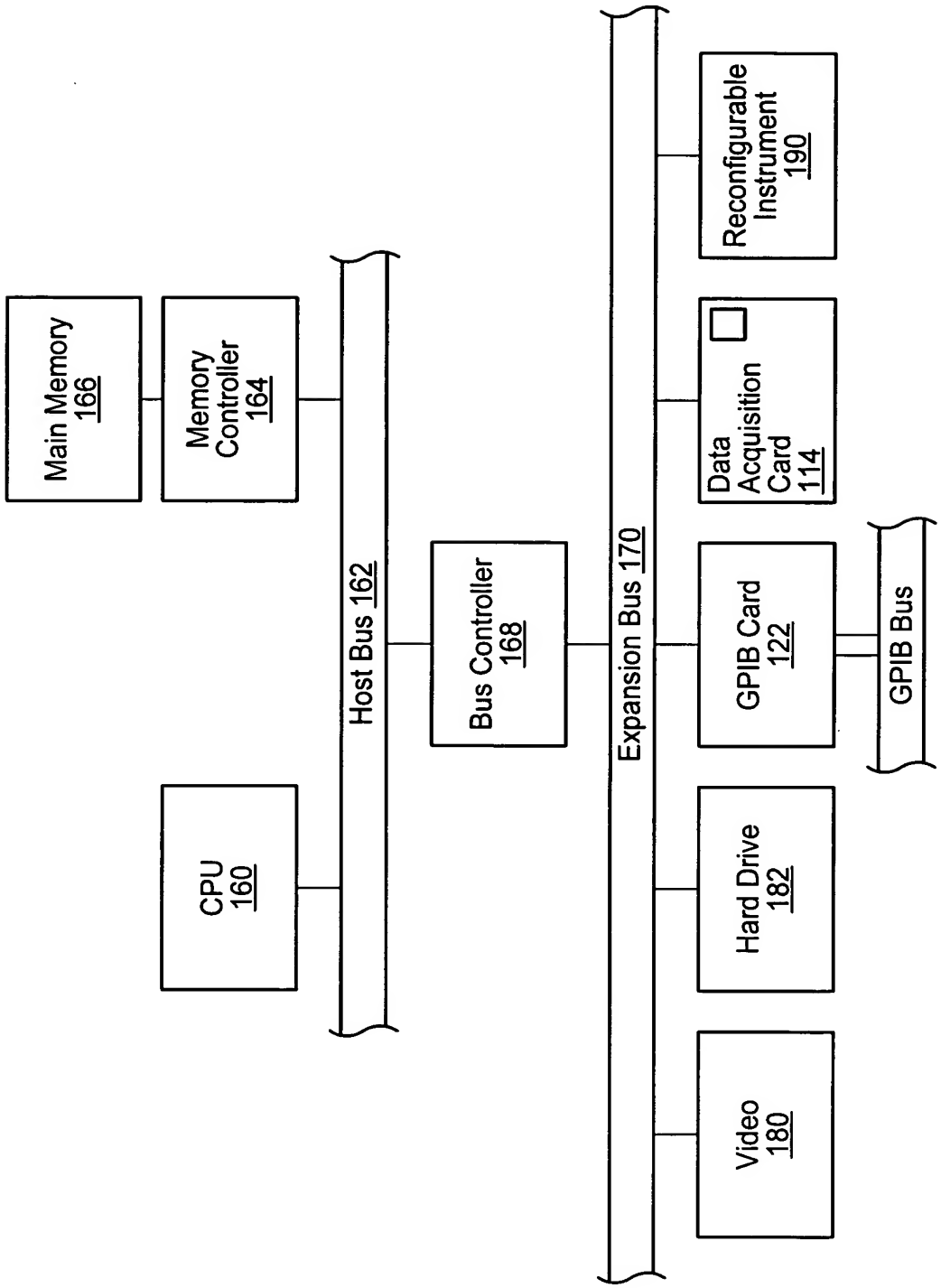

Main Memory 166
Memory Controller 164
Host Bus 162
CPU 160
Bus Controller 168
Expansion Bus 170
Video 180
Hard Drive 182
GPIB Card 122
GPIB Bus
Data Acquisition Card 114
Reconfigurable Instrument 190

FIG. 4

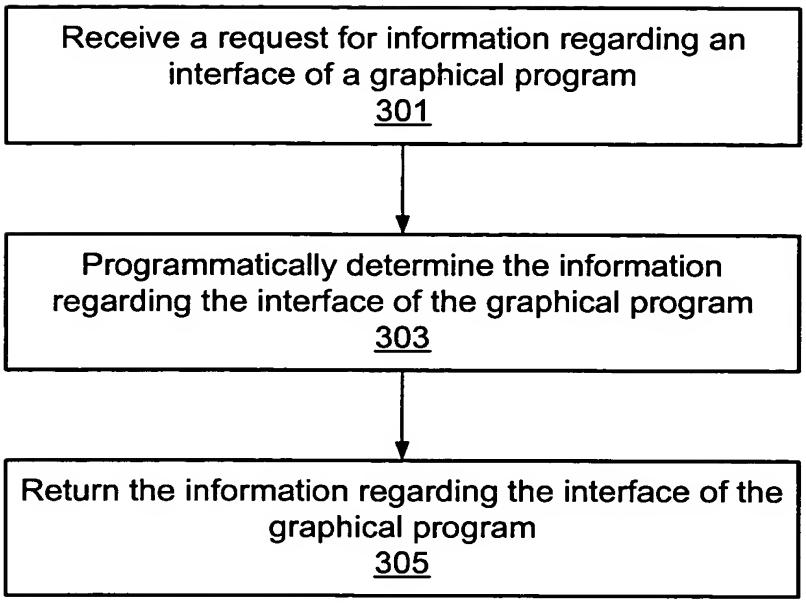

Receive a request for information regarding an interface of a graphical program
301
Programmatically determine the information regarding the interface of the graphical program
303
Return the information regarding the interface of the graphical program
305

FIG. 5

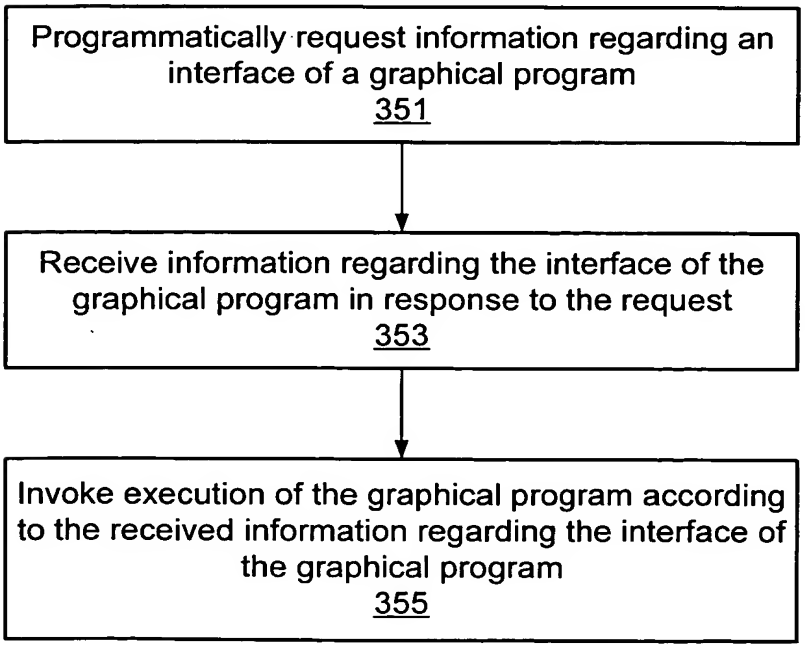
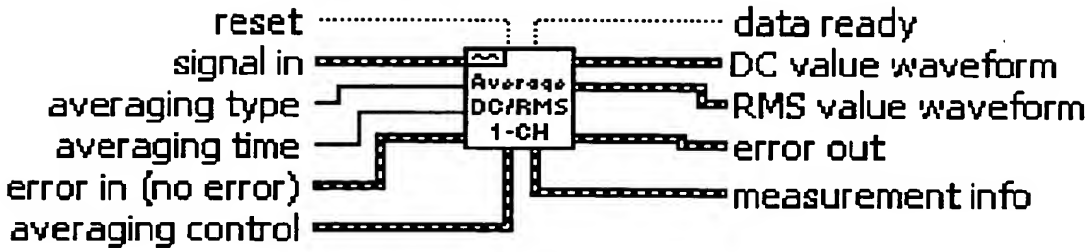

Programmatically request information regarding an interface of a graphical program
351
Receive information regarding the interface of the graphical program in response to the request
353
Invoke execution of the graphical program according to the received information regarding the interface of the graphical program
355

FIG. 6



Averaged DC-RMS for 1 Chan.vi

Calculates the DC and/or the RMS values of an input waveform or array of waveforms. You can use this polymorphic VI to calculate DC and RMS values on single channel or multichannel data. The data type you wire to the **signal in** input determines the polymorphic instance to use.

FIG. 7

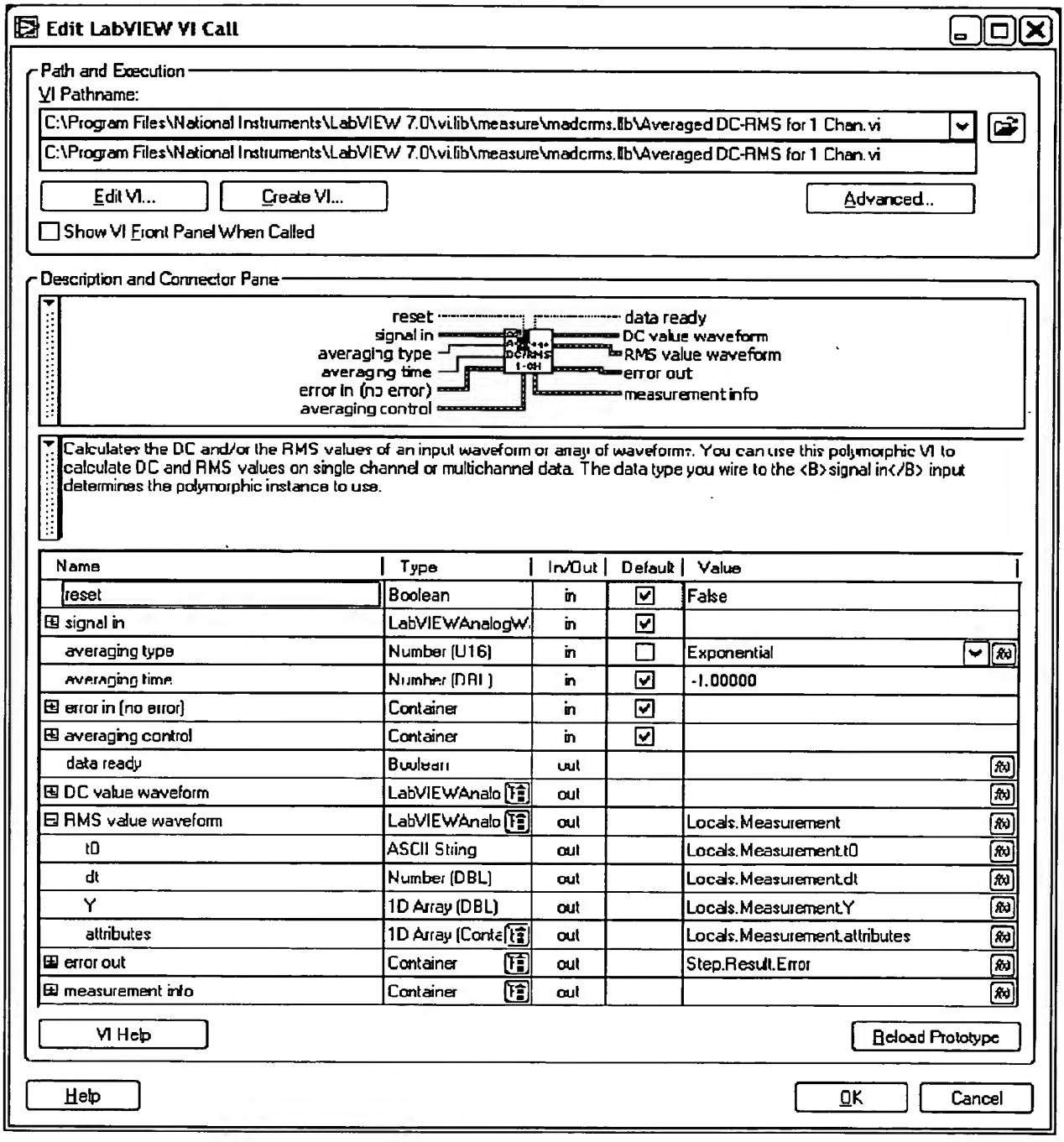

Edit LabVIEW VI Call
Path and Execution
VI Pathname:
C:\Program Files\National Instruments\LabVIEW 7.0\vi.lib\measure\madcrms.llb\Averaged DC-RMS for 1 Chan.vi
C:\Program Files\National Instruments\LabVIEW 7.0\vi.lib\measure\madcrms.llb\Averaged DC-RMS for 1 Chan.vi
Edit VI...
Create VI...
Advanced...
Show VI Front Panel When Called
Description and Connector Pane
reset
signal in
averaging type
averaging time
error in (no error)
averaging control
data ready
DC value waveform
RMS value waveform
error out
measurement info
Calculates the DC and/or the RMS values of an input waveform or array of waveforms. You can use this polymorphic VI to calculate DC and RMS values on single channel or multichannel data. The data type you wire to the <B>signal in</B> input determines the polymorphic instance to use.
Name
Type
In/Out
Default
Value
reset
Boolean
in
False
signal in
LabVIEWAnalogW...
in
averaging type
Number (U16)
in
Exponential
averaging time
Number (DBL)
in
-1.00000
error in (no error)
Container
in
averaging control
Container
in
data ready
Boolean
out
DC value waveform
LabVIEWAnalo...
out
RMS value waveform
LabVIEWAnalo...
out
Locals.Measurement
t0
ASCII String
out
Locals.Measurement.t0
dt
Number (DBL)
out
Locals.Measurement.dt
Y
1D Array (DBL)
out
Locals.Measurement.Y
attributes
1D Array (Conta...
out
Locals.Measurement.attributes
error out
Container
out
Step.Result.Error
measurement info
Container
out
VI Help
Reload Prototype
Help
OK
Cancel

FIG. 8